

CLAIM AMENDMENTS

Claim Amendment Summary

Claims pending

- Before this Amendment: Claims 1-5, 18-22
- After this Amendment: Claims 1-5, 18-24

Non-Elected, Canceled, or Withdrawn claims: None

Amended claims: 1 and 18

New claims: 23-24

Claims:

1. (Currently Amended) A method for authorizing an access to a table of address correspondence between a multitask CPU and at least one memory containing several programs, ~~consisting of~~ comprising calculating, on each task change of the CPU, a signature of at least part of the program instruction lines, and checking the conformity of this signature with a signature recorded upon previous execution of the involved program, each signature being associated with a program identifier.

2. (Original) The method of claim 1, wherein said signature is calculated by the implementation of a Hash function.

3. (Original) The method of claim 1, wherein said memory is a RAM in which are loaded program lines from a mass storage.

4. (Original) A processor of multitask execution of several programs, exploiting a table of correspondence between virtual addresses of the lines of the different programs and physical addresses of these lines in at least one memory, each correspondence being associated with an identifier of the involved program, comprising means for calculating a current signature based on at least part of the program lines in said memory, and means for comparing this signature with the identifier of the program stored in the correspondence table.

5. (Original) The processor of claim 4, wherein the identity of the signature and of the program identifier allows the CPU to execute the instruction of the involved program.

6 -17. (Canceled)

18. (Currently Amended) A ~~method for providing security to executing programs, the~~ method comprising:

executing a plurality of programs, each having a unique signature at a CPU, wherein each program includes currently-executing tasks that change;

calculating, on each task change, a new signature of at least part of program instruction lines for the program associated with the task; and

checking the conformity of the new signature with the unique signature.

19. (Previously Presented) The method of claim 18, wherein each signature is calculated by the implementation of a Hash function.

20. (Previously Presented) The method of claim 18, further comprising suspending execution of a program if the new signature and the unique signature do not conform.

21. (Previously Presented) The method of claim 18, further comprising:
storing the new signature in a memory; and
checking the conformity of a next new signature with the stored new signature at the next task change associated with the program.

22. (Previously Presented) The method of claim 18, further comprising establishing the unique signature when the associated program is first executed.

23. (New) The method of claim 18, further comprising:
storing the unique signature in a memory; and
checking the conformity of a next new signature with the stored unique signature at the next task change associated with the program.

24. (New) The method of claim 18, further comprising:
storing the new signature in a memory in response to a first task change;
and

checking the conformity of the new signature with the unique signature in response to a second task change.